Kennecott Utah Copper Corporation P.O. Box 6001 Magna, Utah 84044-6001 (801) 569-6000

(801) 569-6356 (Phone) (801) 569-7192 (Fax)

Rohan McGowan-Jackson Manager, Health, Safety & Environment and Sustainable Development



April 10, 2007

Ms. Susan White, Mining Program Coordinator Minerals Reclamation Program Division of Oil, Gas and Mining 1594 West North Temple, Suite 1210 PO Box 145801 Salt Lake City, Utah 84114-5801

RE: <u>January 31, 2007 DOGM Response on Additional Information Submitted by KUCC on the North Tailings Expansion Optimized Phase 2 Finger Drain System, Task #1667, M/035/015, Salt Lake County, Utah</u>

Dear Ms. White,

In a letter dated December 20, 2007, KUC provided DOGM additional information for the North Tailings Expansion Drainage system for permit #M/035/015. As per prior correspondence, KUC is of the opinion that the configuration of the optimized phase 2 finger drain system is consistent with the general drainage blanket description and footprint contained within the existing tailings reclamation plan and does not impact reclamation activities or the cost estimate provided in the original approved Notice of intent submitted in 1996.

As per the letter sent to KUC, dated January 31, 2007, I understand the Division agrees that the optimized phase 2 finger drain system changes will not affect the reclamation treatments for the impoundment, that the site will remain within the permitted acreage and the bond calculated for reclamation of the site will not need to be adjusted.

As requested, please find attached two copies of the December 20, 2006 letter: Additional Information for North Tailings Expansion Drainage System (M/035/015).

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KUC thanks the Division for their assistance with this matter. Please contact me at 569-6000 or Vicky Peacey (569-7118) if you have any guestions or concerns.

Kind regards

Rohan McGowan-Jackson
Manager Health, Safety, Environment
and Sustainable Devolution

and Sustainable Development

Kennecott Utah Copper

Vicky Peacey CC:

Kennecott Utah Copper Corporation P.O. Box 6001 Magna, Utah 84044-6001 (801) 569-6000

(801) 569-6356 (Phone) (801) 569-7192 (Fax)

Rohan McGowan-Jackson Manager, Health, Safety & Environmental and Sustainable Development



December 20, 2006

Mary Ann Wright State of Utah Department of Natural Resources/DOGM PO Box 145801 Salt Lake City, UT 84114-5801

Dear Mary Ann,

I appreciate your time and that of your staff in meeting with Vicky Peacey, Bruce Jones and myself on October 26, 2006. I believe the meeting was beneficial. Thank you also for your follow up letter of November 1, 2006.

The purpose of this correspondence is to provide you with some initial feedback on KUC's response to the issues discussed during our October 26, 2006 meeting.

Permit Boundary Modification

I believe we now have a better understanding of the process KUC needs to go through in order to obtain a modification to our DOGM permit boundary. Following our discussion, KUC has decided to review the size and specific land area associated with the current nominated permit boundary modification. Rest assured I am eager to move forward on this issue and hope to be able to advise of any additional areas soon.

Cost Estimate

Confirming that KUC is in the process of reviewing the list of additional details requested to be addressed in the cost estimate. I will plan to contact you following this review in order to raise any questions and discuss next steps.

Ongoing Activities

Our meeting on October 26, 2006 was helpful in confirming DOGM's desire to be kept informed of ongoing activities and more specifically to ensure that relevant update material is provided in a manner that will allow DOGM to easily incorporate it within existing plans.

Mary Ann Wright State of Utah, DNR/DOGM Page 2

I wish to reconfirm KUC's desire to work closely with DOGM and share relevant information associated with ongoing activities — and in particular to ensure we do a better job at clarifying where update material should be placed within existing records. However, your letter of November 1, 2006 inferred that KUC would respond to our current discussions associated with ongoing activities in the form of an amendment to the plan. While I agree this was requested by DOGM during our meeting, I don't believe KUC agreed to this course of action. Indeed, you will be aware from previous correspondence that KUC is of the opinion that these ongoing activities are within the approval envelope associated with our existing NOI's and therefore should not be considered as amendments.

Nevertheless, in the interest of resolving this matter and moving forward, KUC is submitting with this letter two Form MR-REV with relevant information attached. Submission of these forms, and the attached information, should not be construed as an admission on KUC's part that KUC was or is required to seek DOGM approval of the activities at issue prior to implementing them.

I hope you appreciate KUC's interest in preserving our view that these ongoing activities are not amendments. Furthermore, I hope that irrespective of this difference of opinion, we have succeeded in our effort to provide you with the update information you desire in a manner that will allow you to easily insert into existing records.

Consistent with this position, I am pleased to provide you with the following updated information as requested:

1. FORM MR-REV: Additional Information for North Tailings Expansion Drainage System (M/035/015)

Please see attached, as requested, copies of the final engineering drawings for the optimized phase 2 finger drain system as described in our August 2, 2005 notification letter.

As per previous correspondence, KUC is of the opinion that the configuration of the optimized phase 2 finger drain system (as detailed in these drawings) is consistent with the brief general drainage blanket description and footprint and does not impact reclamation activities or the cost estimates provided in the original approved Notice of Intent submitted in 1996 and therefore should not be considered an amendment.

Nonetheless, KUC is happy to provide DOGM with this information for inclusion in the M/035/015 plan documents. In this regard, we have provided a new Attachment Q, to be added to Revision H for Volume I of the 1996 Tailings Modernization Project, North Impoundment Expansion, M/035/015. The requested final engineering drawings for the finger drain system are included in this document.

Mary Ann Wright State of Utah, DNR/DOGM Page 3

2. <u>FORM MR-REV: Additional Information for Bingham Canyon Mine, Giant Leap East 1 Pushback (M/035/002)</u>

Please see attached:

a) Update to Table 2-1 Facilities and Structures (M/035/002)

As requested in your letter of February 16, 2006 please see attached an updated copy of Table 2-1 (R2) Facilities and Structures within the M/035/002 Permit Boundary.

This table has been updated to reflect KUC's progress in implementing ongoing demolition activities as per the Bingham Canyon Mine 2003 Mine Reclamation and Water Management Plan.

KUC's suggests the attached Table 2-1 (R2) replace the existing Table 2-1, located at page 11 and 12 within the Bingham Canyon Mine 2003 Mine Reclamation and Water Management Plan.

b) Update to Figure 4-6 Reclamation Activities on Bingham Canyon Mine Waste Rock Disposal Areas (M/035/002)

Please see attached an updated version of Figure 4-6 Reclamation Activities on Bingham Canyon Mine Waste Rock Disposal Areas.

This updated figure includes information associated with the expected location of additional overburden material associated with the East 1 pushback.

In relation to your letter of February 16, 2006 – and as discussed during our meeting on October 26, 2006, KUC does not expect that this activity will adversely impact any of the reclamation treatments defined in the Bingham Canyon Mine 2003 Mine Reclamation and Water Management Plan – and therefore should not be considered an amendment. Indeed, KUC will work to segregate waste rock from the East 1 pushback, and we are hopeful that it will provide additional opportunities to extend existing approved treatments. However, we will need to wait to better understand the final specific quantity of low ARD generating rock before confirming any extension to the existing approved reclamation treatment areas.

KUC suggests that the attached Figure 4-6 (R2) replaces the existing Figure 4-6 within the Bingham Canyon Mine 2003 Mine Reclamation and Water Management Plan.

Mary Ann Wright State of Utah, DNR/DOGM Page 4

Other issues

Additional Demolition

As per my letter to Ms. Susan White, dated 8th December 2006, I would also like to confirm that KUC is planning to advance significant addition demolition activities during 2007 and 2008. This is good news and represents further evidence of KUC's investment in ongoing reclamation. I have asked Kelly Payne, who will be managing this work for KUC, to contact your office in order to schedule a time for a formal briefing.

2006 Report and Presentation to Board

As previously discussed, KUC is also gearing up for our 2006 Report and presentation to the DOGM Board. I understand this is planned to occur as part of the January 2007 Board Meeting. Vicky Peacey will continue to liaise with your office in order to finalize preparations for this presentation.

KUC Tour for DOGM Board

I would again like to reinforce our desire to organize for the Board of DOGM to visit KUC. In this regard, I would value your assistance and/or advice in setting up a tour.

Thank you again for your time in meeting with KUC on October 26, 2006. I believe we are making progress and moving in the right direction. I hope you share this opinion.

I look forward to further communications in due course.

Kind regards,

Rohan McGowan-Jackson
Manager HSE & SD

Kennecott Utah Copper

Vicky Peacey cc:

> Kelly Payne **Bruce Jones** Scott Lawson

FORM MR-REV

ADDITIONAL INFORMATION NORTH TAILINGS EXPANSION OPTIMIZED PHASE 2 FINGER DRAINAGE SYSTEM

PERMIT M/035/015

KENNECOTT UTAH COPPER CORPORATION

SUBMITTED TO THE UTAH DIVISION OF OIL, GAS AND MINING DECEMBER 2006

I. GENERAL INFORMATION

Location of Proposed Activities:

There are no changes to the location of proposed activities.

Ownership of Land Surface:

There are no changes to ownership of land surface.

Ownership of Minerals:

There are no changes to ownership of minerals.

II. MAPS, DRAWINGS & PHOTOGRAPHS

Volume I, Attachment A, Revision H in the original Notice of Intent for the Tailings Modernization Project, North Impoundment Expansion, M/035/015 submitted in 1996 provides a brief general description of the drainage blanket, but does not specify any engineering details relating to the drainage blanket configuration. The drainage blanket is briefly described in Volume 1 on page 6 (Attachment A, Revision H), a schematic of a typical cross section is shown in Figure 7 (Attachment A, Revision H), and the embankment footprint is shown in Attachment B, Figure 1-2.

The optimized phase 2 drainage finger design is consistent with general drainage blanket description and footprint area described in the current plan, thus no drawings need to be updated.

However, text has been included in a new Attachment Q, located in Appendix 1 of this document, which provides a more detailed description of the drainage fingers as well as the addition of engineering drawings including:

Figure 1 - A cross section of the North Tailings Embankment with Phase 1 (Zone A) and drainage blanket construction as well as Phase 2 (Zone B&C) and drainage fingers construction.

Figure 2 – An engineering drawing of a typical drainage finger section.

Figure 3 – A plan view of the as-built and surveyed finger drains.

Appendix 2 contains a revised table of contents, which should replace the existing table of contents currently contained within the original Notice of Intent for the Tailings Modernization Project, North Impoundment Expansion, M/035/015 submitted in 1996

Appendix 3 contains a completed "Application for Mineral Mine Plan Revision or Amendment" form showing items that should be added and replaced to Volume I of the 1996 NOI.

III. OPERATION PLAN

There are no additional surface disturbances and the total number of acres affected remains consistent with the original 1996 NOI. Construction of phase 2 finger drains remains within the boundaries of DOGM permit number M/035/015 and will not increase the permitted disturbed area allocated for the North Tailings Impoundment (3,334 acres).

Furthermore, there are no changes to the operating plan for disposal of tailings within the North Embankment. The phase 2 optimization simply results in the construction of drain fingers rather than a continual drainage blanket.

The phase I drainage blanket covers approximately 675 feet, while Phase 2 covers an additional 405 feet of the 1080-foot embankment footprint width. If a drainage blanket was constructed as part of Phase 2 it would also have been 405 feet. Both drainage systems have a total thickness of 3 feet and consist of a 10-inch layer of minus 2-inch drain rock underlain and overlain by layers of finer-graded filter materials.

IV. IMPACT ASSESSMENT

The optimized drainage design through the use of drainage fingers will not have any additional surface or subsurface impacts on the following areas:

- No potential impacts to state or federal threatened and endangered species or critical habitats since the large majority of waste rock will be placed on lifts within existing disturbed waste rock areas;
- 2. There will be no additional impacts to surface or groundwater systems through construction of the optimized drainage finger system. There are no changes to the surface of the embankment or to the subsurface of the embankment apart for the fact that instead of a continual drainage blanket, the North Embankment will be underlain by drainage fingers. A cross section through a drainage finger looks identical to a cross section of the drainage blanket. The Optimized Phase 2 finger drains meet the same requirements for drainage with less material requirements.
- 3. The optimized phase 2 finger drains will not impact existing soil resources.
- 4. The optimized phase 2 finger drains will not further impact public health or safety or air quality. The optimized phase 2 finger drains will remain within the limits of the Tailings Impoundment Air Approval Order (DAQE-AN0571018-06) and Title V Air Permit for the Tailings Impoundment (DAQE-AN0571018-06). The finger drains will not further degrade surface erosion or slope stability.
- 5. KUCC believes there will be no addition impacts to mitigate due to the optimized phase 2 finger drains.

V. RECLAMATION PLAN

There are no changes to the reclamation plan.

VI. VARIANCE

KUCC is not requesting a variance.

VII. SURETY

The installation of drainage fingers versus a drainage blanket beneath phase 2 (Zone B&C) of the North embankment will not change the configuration of the North Embankment and thus will not change the amount of work required to reclaim the site.

APPENDIX 1

Attachment Q
Volume 1, Notice of Intent for the Tailings Modernization Project,
North Impoundment Expansion, 1996

Additional Information, Optimized Phase 2 Drainage Fingers

PERMIT M/035/015

KENNECOTT UTAH COPPER CORPORATION

SUBMITTED TO THE UTAH DIVISION OF OIL, GAS AND MINING DECEMBER 2006 Volume I, Attachment Q, Notice of Intent, Tailings Modernization Project, North Impoundment Expansion, M/035/015, 1996



TAILINGS MODERNIZATION PROJECT

ATTACHMENT Q

ADDITIONAL INFORMATION FOR THE NORTH TAILINGS EMBANKMENT OPTIMIZED PHASE 2 FINGER DRAIN DESIGN

KENNECOTT UTAH COPPER CORPORATION
December 2006

Volume I, Attachment Q, Notice of Intent, Tailings Modernization Project, North Impoundment Expansion, M/035/015, 1996

ATTACHMENT Q

North Tailings Embankment Optimized Phase 2 Finger Drains

The North Impoundment has been designed and is being constructed using modern state-of-the-art design methods described as a modified centerline embankment. The North Embankment is constructed using compacted cyclone sand tailings. A water under-drain system beneath the North Embankment is critical to the proper operation of the North Impoundment.

The North Impoundment provides adequate storage capacity for continued copper mining activities in addition to providing envelopment and buttressing to the seismically vulnerable portions of the South Impoundment. As discussed in the Notice of Intent for the North Tailings Impoundment (M/035/015) there are insufficient tailings available on an annual basis to construct the full base width of the North Embankment. Therefore, the embankment is being constructed in two phases.

Phase 1

Phase 1 construction includes Zone A of the North Embankment. To facilitate dewatering of the existing Zone A embankment area. The Zone A embankment was constructed on a 3ft thick composite slag aggregate drainage blanket. Phase 1 is nearing completion and the Zone A embankment allows storage of tailings through approximately 2013.

Phase 2

Phase 2 construction includes Zones B&C. The Phase 2 under-drain system was originally designed similar to Zone A, however an optimized under-drain system was required. A cross section of the North Embankment is shown in Figure 1. Instead of a drainage blanket, it was determined that the optimized Phase 2 finger drain system could be constructed.

Both the drainage blanket and drainage fingers will facilitate drainage within the embankment and foundation. Similar to the embankment, the drainage system was also originally designed to be constructed in two phases. This was to allow observation of geotechnical performance of the Phase 1 drain prior to finalizing design and construction of Phase 2. Following five years of operation (1999 – 2004) and monitoring of the Zone A embankment and Phase 1 drainage system, the Phase 2 drain design was optimized. The optimization resulted in drain fingers for the Phase 2 area rather than a drain blanket. The drain fingers consist of 50-foot wide drains placed at 150-feet on center. A total of 242 drain fingers will be constructed in the Phase 2 expansion area and all drain fingers will be tied into the existing Phase I drain blanket.

The Phase I drainage blanket covers approximately 675 feet, while Phase 2 covers an additional 405 feet of the 1080-foot embankment footprint width. Both drainage systems have a total thickness of 3 feet and consist of a 10-inch layer of minus 2-inch drain rock underlain and overlain by layers of finer-graded filter materials. A typical drainage finger section is shown on Figure 2, while a plan view of the surveyed finger drains is shown on Figure 3.

Volume I, Attachment Q, Notice of Intent, Tailings Modernization Project, North Impoundment Expansion, M/035/015, 1996

Placement of the drainage blanket beneath the embankment began in mid-1996, while construction of the finger drains begin in mid to late 2005. Both the drainage blanket and finger drains minimize embankment saturation, reduce foundation pore pressures, and facilitate drainage and compaction of the underflow used to construct the embankment.

Embankment foundation preparation was required in all areas to be covered by the finger drains. Ponded water was drained by ditches and pumped to evaporation ponds within the impoundment footprint or discharged in accordance with UPDES permit, well in advance of finger drain placement. Coarse-grained slag materials were placed in soft areas as necessary to establish trafficability for drainage blanket and finger drain construction. Depending on foundation conditions, a geotextile may also be installed over soft, wet areas to further improve trafficability and minimize finger drain material requirements.

The optimization of Phase 2 finger drain system allows for reduced quantities of slag for construction of the fingers, however potential future slag deficits had no bearing on the design optimization. The Phase 2 design reflects only ideal geotechnical performance criteria and the optimization would have been undertaken regardless of available slag quantities.

The optimized Phase 2 finger drain system meets the original geotechnical design criteria in the original permit application submitted in 1996. The revised under-drain design was reviewed and approved by the Utah State Engineer's Office in March 2004. Construction of Phase 2 remains within the boundaries of DOGM permit number M/035/015 and will not increase the permitted disturbed area allocated for the North Tailings Impoundment (3,334 acres) and thus will not change the reclamation activities planned for the North embankment.

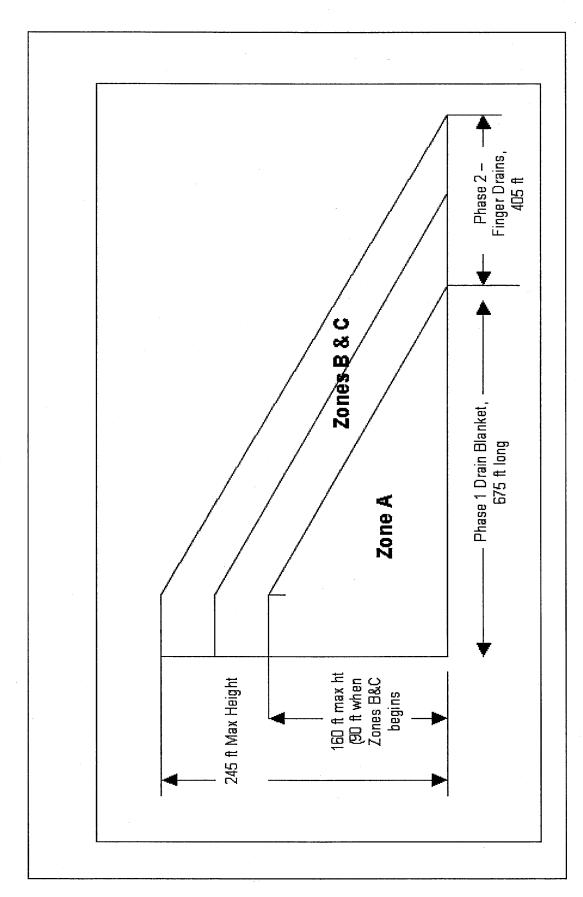


Figure 1: North Tailings Embankment Cross Section and Construction Zones for the Drainage Blanket and Drainage Fingers.

